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**NUNAVUT WATER BOARD**  
**NUNAVUT IMALIRIYIN KATIMAYINGI**

## **EXPLORATION/ REMOTE CAMP SUPPLEMENTARY QUESTIONNAIRE**

**Applicant:** Golden Bull Resources Corp.

**Licence No:** \_\_\_\_\_

(For NWB Use Only)

### **ADMINISTRATIVE INFORMATION**

1. Environment Manager: Bruce Goad, P. Geo Tel: 604-533-2255 Fax: N/A  
E-mail: [inukshuk@uniserve.com](mailto:inukshuk@uniserve.com)

2. Project Manager: Bruce Goad, P. Geo Tel: 604-533-2255 Fax: N/A  
E-mail: [inukshuk@uniserve.com](mailto:inukshuk@uniserve.com)

3. Does the applicant hold the necessary property rights?

The property rights to the IOL are held 100% by Tahera Diamond Corp. Golden Bull Resources has an agreement in place with Tahera where Golden Bull can explore all Tahera held ground for non-diamond resources. An application for a Land Use Permit has been submitted to INAC for work on the federal land (under the waters of the East Arm of Contwoyto Lake).

4. Is the applicant an 'operator' for another company (i.e., the holder of the property rights)?  
If so, please provide letter of authorization.

No

5. Duration of the Project

Annual

☒ Multi Year (Seasonal: 2008 to 2011):

If Multi-Year indicate proposed schedule of on site activities

Start: June 01, 2008 Completion: September 30, 2011

Start: \_\_\_\_\_ Completion: \_\_\_\_\_

### **CAMP CLASSIFICATION**

6. Type of Camp

☐ Mobile (self-propelled)

☒ Temporary

☒ Seasonally Occupied: June 1 to September 30 of 2008, 2009 and 2011

[ ] Permanent

[ ] Other: \_\_\_\_\_

7. What are the design population of the camp and the maximum population expected on site at one time? What will be the fluctuations in personnel?

The proposed camp will be constructed to hold up to a maximum of 25 people when the drill program is operational. For the most of the exploration season the camp will host 12 to 15 people. Additional personnel will be contractors (Geophysical, Drilling). Two camp locations are proposed. The northern or Hood River Camp will be established and utilized during 2008; the more southerly camp, the Contwoyto Camp will be established and utilized during 2009. Depending upon results, one of the camps will be utilized in 2010 and both camps will be remediated in late 2010.

8. Provide history of the site if it has been used in the past.

The site Penthouse Lake site was used previously by Aber/BHP. The alternate Esker Lake site to the best of my knowledge has not been used previously. The Contwoyto Site has not been used previously. The back-up site at the eastern end of the East Arm of Contwoyto Lake was previously used by Hecla Mining.

## CAMP LOCATION

9. Please describe proposed camp location in relation to biogeographical and geomorphological features and water bodies.

In the HOOD AREA the proposed Penthouse Lake camp is located at 66° 53' 46" N and 110° 54' 45" W, at the western end of Penthouse Lake. Penthouse Lake will be used as a landing site. The proposed back-up site on Esker Lake is located at 66° 50' 44" N and 110° 57' 00" W on the large esker that divides Esker Lake. Esker Lake will be used as a landing site.

In the CONTWOYTO AREA the proposed Contwoyto Lake camp is located at 65° 47' 24" N and 110° 43' 33" W, on the south shore of the East Arm of Contwoyto Lake. Contwoyto Lake will be used as a landing site. The proposed back-up Hecla Camp site at the eastern end of the East Arm of Contwoyto Lake is located at 65° 48' 37" N and 110° 39' 27" W. Contwoyto Lake will be used as a landing site.

The proposed camp is a winterized canvas tent camp with wooden tent floors and sides for approximately 14 tents (7 for sleeping, 1 for first aid, 1 for storage, 1 for the cook, 1 for core logging, a dry, a kitchen and an office).

10. How was the location of the camp selected? Was the site previously used? Was assistance from the Regional Inuit Association Land Manager sought? Include maps and/or aerial photographs.

Selection was based on a number of factors including: previous use of the site and evaluation of appropriateness for a camp (esker for landing, water supply, minimal potential for wildlife interaction), proximity to the work site, etc.

11. Is the camp or any aspect of the project located on:

SLAVE PROJECT: Exploration / Remote Camp Supplementary Questionnaire  
Golden Bull Resources Corp.

<input checked="" type="checkbox"/> Crown Lands	Permit Number (s)/Expiry Date: under application
<input type="checkbox"/> Commissioners Lands	Permit Number (s)/Expiry Date: _____
<input checked="" type="checkbox"/> Inuit Owned Lands	Permit Number (s)/Expiry Date: under application.

12. Closest Communities (distance in km):

The Penthouse/Esker camp will be located adjacent to the ULU exploration site, approximately 210 km southeast of the hamlet of Kugluktuk (Coppermine) and 125 km west of the hamlet of Bathurst Inlet. The Contwoyto concessions are located approximately 120 km south of the proposed Penthouse Lake Camp on the Hood Concession. Yellowknife is located approximately 535 km to the southwest of the Contwoyto Concessions.

13. Has the proponent notified and consulted the nearby communities and potentially interested parties about the proposed work?

No letters of notification were sent to the Mayor and Hamlet offices of the above noted communities as the company believes that they will not be affected by the proposed exploration program.

14. Will the project have impacts on traditional water use areas used by the nearby communities? Will the project have impacts on local fish and wildlife habitats?

See attached NIRB Table 1.

## PURPOSE OF THE CAMP


15. ☒ Mining  
☐ Tourism (hunting, fishing, wildlife observation, adventure/expedition, etc.)  
(Omit questions # 16 to 21)  
☐ Other \_\_\_\_\_ (Omit questions # 16 to 22)

16. ☐ Preliminary site visit  
☒ Prospecting  
☒ Geological mapping  
☒ Geophysical survey  
☒ Diamond drilling  
☐ Reverse circulation drilling  
☐ Evaluation Drilling/Bulk Sampling (also complete separate questionnaire)  
☐ Other: \_\_\_\_\_

17. Type of deposit:  
☐ Lead Zinc  
☐ Diamond  
☒ Gold (showing)  
☐ Uranium  
☐ Other: \_\_\_\_\_

**THE NUNAVUT IMPACT REVIEW BOARD  
SCREENING PART 2 FORMS**

**TABLE 1 - IDENTIFICATION OF ENVIRONMENTAL IMPACTS**

		<b>ENVIRONMENTAL COMPONENTS</b>		<b>PHYSICAL</b>		designated environmental areas (ie. Parks, Wildlife Protected areas)	ground stability	permafrost	hydrology/ limnology	water quality	climate conditions	eskers and other unique or fragile landscapes	surface and bedrock geology	sediment and soil quality	tidal processes and bathymetry	air quality	noise levels	other VEC:	other VEC:	other VEC:	<b>BIOLOGICAL</b>		vegetation	wildlife, including habitat and migration patterns	birds, including habitat and migration patterns	aquatic species, incl. habitat and migration/spawning	wildlife protected areas	other VEC:	other VEC:	other VEC:	<b>SOCIO-ECONOMIC</b>		archaeological and cultural historic sites	employment	community wellness	community infrastructure	human health	other VSEC					
<b>PROJECT ACTIVITIES</b>																																											
<b>CONSTRUCTION</b>	<b>Camp and Airstrip</b>																																										
	Site preparation - groundwork							M										M					M	M																	P		
	Set up buildings																	M					M	M																	P		
	Helicopter and plane access																	M	M				M	M	M																P		
	Water use							M																		M															U		
	Movement of people within camp																		M					M	M																U		
	Power supply																	M	M					M																	P		
	Fuel use and storage									M														M			M														U		
Waste disposal (food, materials, fuel, sewage)								M	M	M		M		M		M							M	M	M	M														P			
<b>OPERATION</b>	<b>Exploration Activities</b>																																										
	Camp Use																							M	M	M																P	
	Helicopter access																	M	M					M	M																	U	
	Foot access - prospecting / staking / geophysics																							M	M																	P	
	Drilling (incl. site prep and water use)							M	M	M				M	M								M	M	M																U		
	Wildlife interactions																								M																		U
	Geophysical Surveys																						M	M	M																P		
	Snowmobiles used with Geophysical Surveys																							M																		U	
	Geophysical Surveys																							M																		M	
	Water use								M		M																M															U	
	Movement of people within camp																							M	M																	P	
	Power supply																							M	M																	U	
	Fuel use and storage									M	M		M		M									M			M															P	
Waste disposal (food, materials, fuel, sewage)								M	M	M		M		M		M							M	M	M	M															P		
<b>DECOMMISSIONING</b>	<b>Reclamation and Remediation</b>																																										
	Site abandonment								M	M				M		M	M							M																		P	

Notes: Please indicate in the matrix cells whether the interaction causes an impact and whether the impact is:

- P** Positive  
**N** Negative and non-mitigable  
**M** Negative and mitigable  
**U** Unknown

If no impact is expected then please leave the cell blank

Prepared for: Golden Bull Resources Corporation,  
(a 100% owned subsidiary of Golden River Resources Corporation.)

Date: June 26, 2007.

Prepared by: Bruce Goad, P. Geo.,  
Inukshuk Exploration Inc.  
21861 44 A Avenue,  
Langley, British Columbia.  
CANADA V3A 8E1

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## DRILLING INFORMATION

### 18. Drilling Activities

- ✓ . Land Based drilling
- ✓ . Drilling on ice

### 19. Describe what will be done with drill cuttings?

Drill cuttings and water will be pumped to a sump (natural depression or temporary dyke) to trap cuttings allowing the water to infiltrate back into the ground. At the end of any drill program, all sumps shall be backfilled with native surficial material upon completion of drilling and contoured to match the existing landscape.

### 20. Describe what will be done with drill water?

See number 19 above

### 21. List the brand names and constituents of the drill additives to be used? Includes MSDS sheets and provide confirmation that the additives are non-toxic and biodegradable.

The exact type of Chemicals and Hazardous Materials that will be onsite is not known at this time. Golden Bull Resources Corporation will ensure that they and the drilling contractor maximize the use of non-toxic and biodegradable additives and environmentally “friendly” cleaning products. The Spill Contingency Plan will be updated with appropriate MSDS sheets once the drilling additives and cleaning products have been determined. However, until confirmed, it could be assumed that the following materials may potentially be present; stored in their original container in the storage facility or when in use, at the drill site:

Item:	Use:
• tube grease - Beacon 2, Beacon 3, threokote 706, Z-50 pipe dope	Drilling Lubricant
• calcium chloride flake	Drilling anti freeze
• circulation polymer – G-stop	Drilling additive
• antifreeze – Esso HD antifreeze	Anti freeze
• rod grease – Big Bear diamond drill rod grease	Drilling Lubricant
• drill fluid additive – 550X polymer	Drilling additive
• motor oil – super plus SAE 10W30 and 15W-40	Drilling Lubricant
• hydraulic oil – Harmony AW 22, 32, 46, 68	Hydraulic systems
• Household chemicals Javex, soaps, detergents, degreasers	Cleaner
• Insect repellent	Repellent
• Lead batteries at generator, drill.	Starting Power

The required amounts of these materials have yet to be decided. They will be stored in their original box/container in the drilling supply or camp supply shack when not in use.

### 22. Will any core testing be done on site? Describe.

Core splitting will be conducted manually and with a core saw. Cuttings will be routed through a sump.

## SPILL CONTINGENCY PLANNING

23. Does the proponent have a spill contingency plan in place? Please include for review.

The spill contingency plan is attached.

24. How many spill kits will be on site and where will they be located?

When the camp is operational, spill kits will be located at the camp (1) at the fuel and material storage at the airstrip (1) and with the drill (1).

25. Please describe the types, quantities, and method of storage of fuel and chemicals on site, and provide MSDS sheets.

Fuel required during the program will be moved onsite via aircraft. All fuel (except propane) will be stored in 205 litre (45 gallon) drums. Propane will be stored in regulation 100 pound cylinders. All fuel drums, bungs and seals will be in good condition to prevent leakage. The fuel drums will be stored within a temporary berm that is capable of holding 110% of the volume of the fuel stored within. Where fuel is not within the berm, the tanks will be stored on their side, positioned so that a line drawn between the two bung openings is horizontal. It is estimated that the following quantities of fuel will be required:

Product	Amount	Container	Use
Diesel (P50)	200 drums	45 gallon containers	Drill and heat, power
Jet B fuel	230 drums	45 gallon containers	Helicopter fuel
Propane	20 bottles	100 lb tanks	cooking and hot water
Gasoline	2 drums	45 gallon containers	rock saw, pumps.

Total propane stored onsite at the base camp will be approximately 5-7 canisters (100 lb) that will be re-supplied as required during food re-supply flights. It is estimated that 20 bottles will be required in total during one field season. In addition, not all diesel and Jet B fuel will be stored on site at one time. It is likely that the fuel supply will be replenished on an "as required" basis. All fuel containers will be properly labeled and sealed with GBR's name, fuel product type, and year purchased or filled.

MSDS sheets will be attached to the Spill Contingency Plan.

## WATER SUPPLY AND TREATMENT

26. Describe the location of water sources.

When the camp is in use, water for the camp will be obtained from the large lakes adjacent to the camp (Penthouse Lake / Esker Lake / Contwoyto Lake). Water or drilling will be provided from smaller lakes in the drill area (See attached Figures 1 and 2: NAD 27).

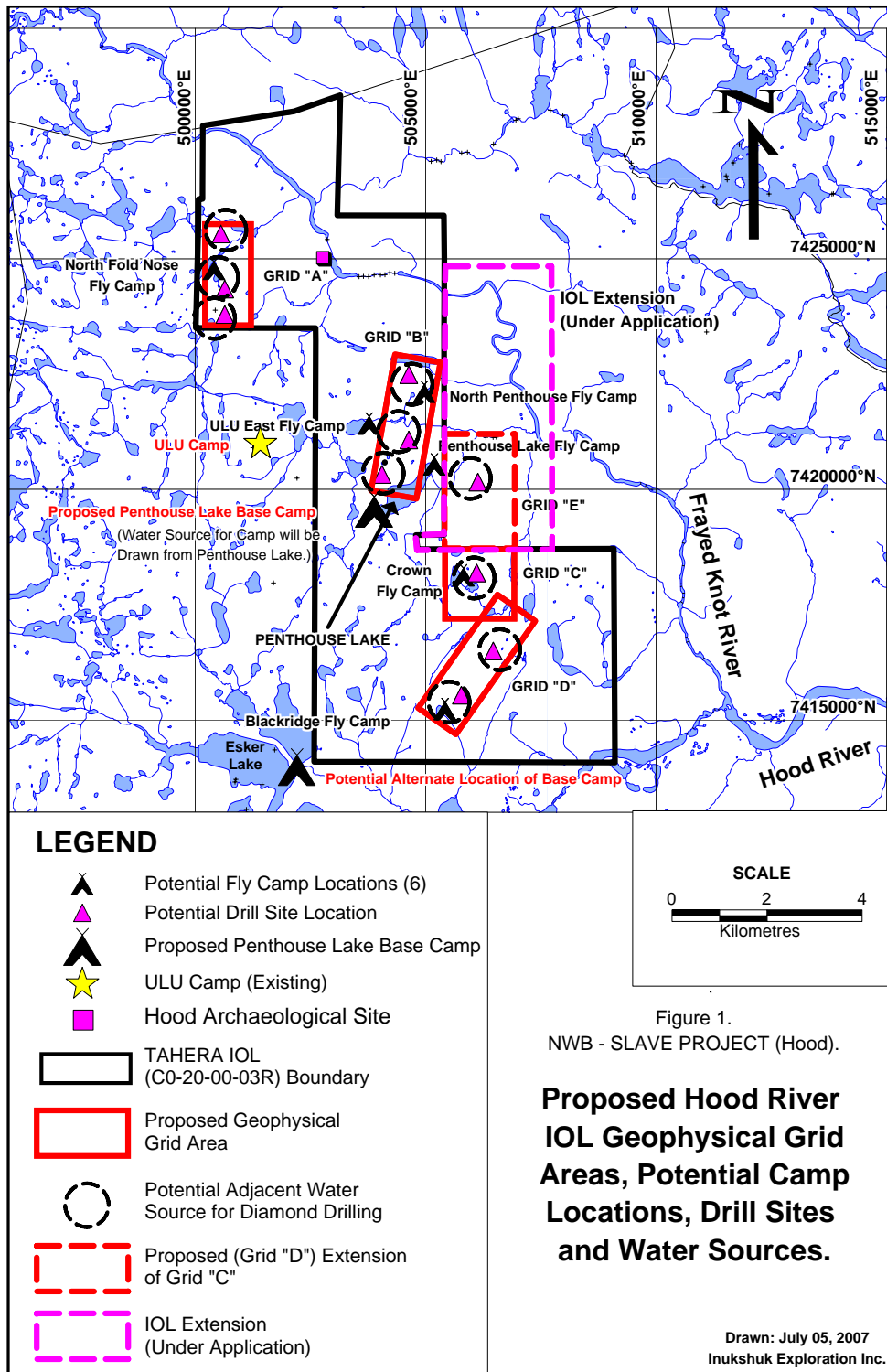
27. Estimated demand (in L/day \* person):

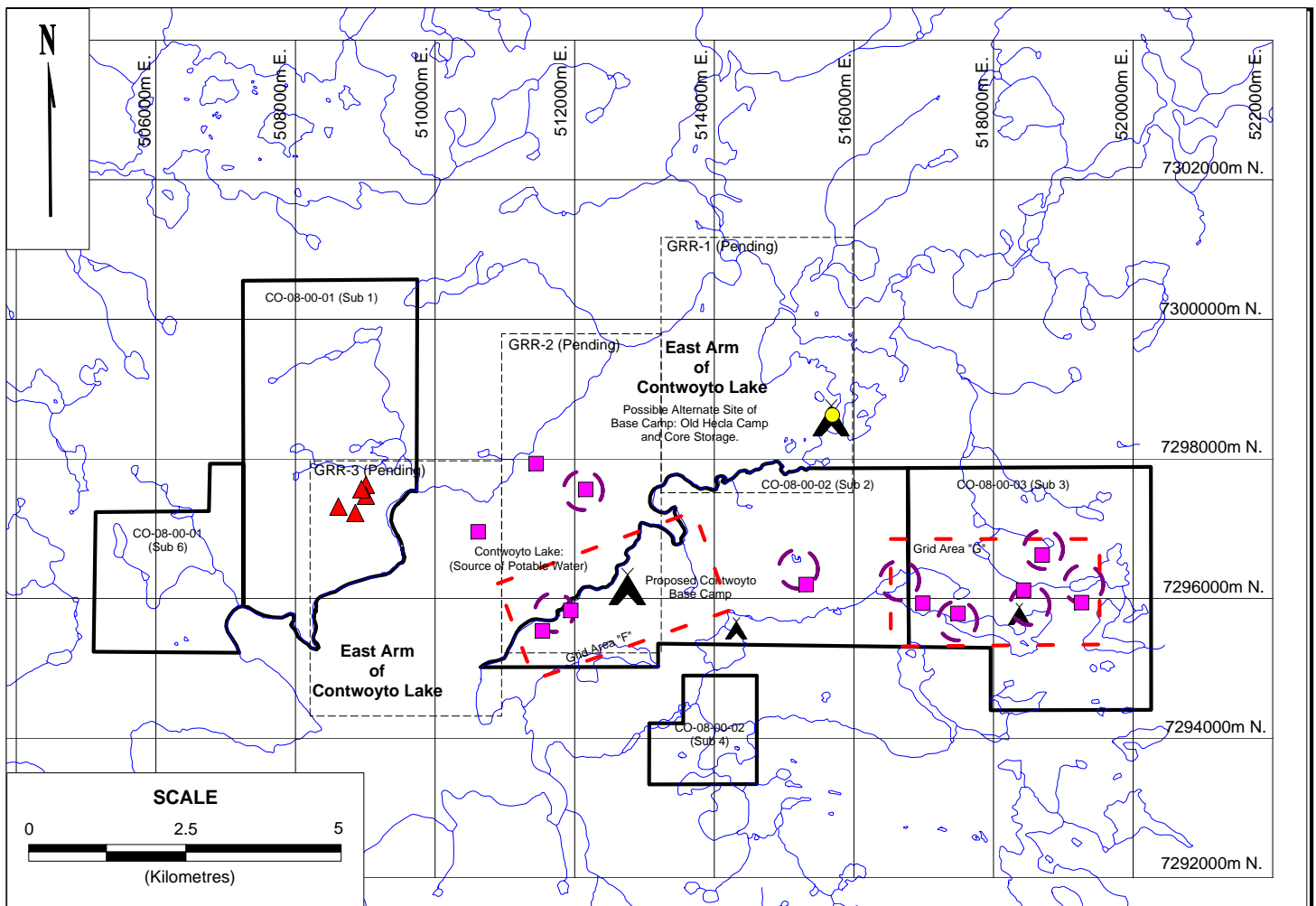
Water will be required for the camp and for a proposed drill program.

✓ Domestic Use: 2000 L/day for <25 people Water Source: (Penthouse/Eske/Contwoyto Lk.)

SLAVE PROJECT: Exploration / Remote Camp Supplementary Questionnaire

Golden Bull Resources Corp.





## LEGEND





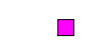



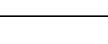
-  Proposed Fly Camp Location
-  Potential Back Up Base Camp Location
-  Proposed Base Camp Location
-  Proposed Geophysical Grid Area
-  Tahera IOL Boundary
-  Potential Drill Site
-  Source of Drill Water
-  Known Archaeological Site
-  GRR Claims (Pending)

Figure 2.  
NWB - SLAVE PROJECT (Contwoyto Area).

## Proposed Contwoyto IOL Geophysical Grid Areas and Potential Camp Locations, Drill Sites and Water Sources.

Drawn: July 04, 2007.  
Inukshuk Exploration Inc.



☒ Drilling Units: 45,800 L/day (Estimate)

Water Source: Lakes adjacent to drill site

☐ Other: \_\_\_\_\_

Water Source: \_\_\_\_\_

*(Water Sources are indicated on Figures 1 and 2.)*

28. Describe water intake for camp operations? Is the water intake equipped with a mesh screen to prevent entrapment of fish? Describe:

When the camp is in use, water intake will be via a land based pump and the intake will include a mesh screen to prevent entrainment of fish. Screening will meet the DFO end-of-pipe fish screen guidelines.

29. Will drinking water quality be monitored? What parameters will be analyzed and at what frequency?

Analysis for bacteriological parameters (total and fecal coliform) in treated potable water will be conducted once each month. Analysis for turbidity, colour, odour, total dissolved solids, nitrate, sulfate, chloride, fluoride, cyanide and total metals will be conducted at the beginning of the camp inhabitation.

30. Will drinking water be treated? How?

Potable water will be chlorinated as required under the Public Health Act Water Sully Regulations.

31. Will water be stored on site?

A holding tank will store treated potable water.

## **WASTE TREATMENT AND DISPOSAL**

32. Describe the characteristics, quantities, treatment and disposal methods for:

☒ Camp Sewage (blackwater)

Pacto toilets will be used and waste incinerated onsite.

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☒ Camp Greywater

Grey water will be discharged into a sump in pervious material a minimum of 30 metres from edge of any body of water.

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☒ Solid Waste

These items will be incinerated

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☒ Bulky Items/Scrap Metal

These items will be removed from site and disposed of at an approved site in Yellowknife.

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☒ Waste Oil/Hazardous Waste

Waste oil can be incinerated and used as incineration fuel.

Any hazardous waste will be removed from site and disposed of at an approved site in Yellowknife.

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☒ Empty Barrels/Fuel Drums

Empty barrels will be removed from site back to Yellowknife for re-use.

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☐ Other:

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33. Please describe incineration system if used on site. What types of wastes will be incinerated?

Burnable waste including camp waste (kitchen, paper, packaging, small wood and sewage) will be incinerated. This will be in a 205 L burn barrel or a CSA environmentally-rated incinerator.

34. Where and how will non-combustible waste be disposed of? If in a municipality in Nunavut, has authorization been granted?

All non combustible waste material generated by the camp will be backhauled to Yellowknife.

35. Describe location (relative to water bodies and camp facilities ) dimensions and volume, and freeboard for sumps (if applicable).

The grey water sump will be located a minimum of 30 metres from the edge of all water sources within pervious material (esker). The sump freeboard will be a minimum of 30 cm and dimensions 1 m by 1 m by 1.5 m deep.

36. Will leachate monitoring be done? What parameters will be sampled and analyzed, and at what frequency?

No, there will be no leachate generated.

## OPERATION AND MAINTENANCE

37. Have the water supply and waste treatment and disposal methods been used and proven in cold climate? What known O&M problems may occur? What contingency plans are in place?

Proposed methods (or similar) have been used at other exploration sites in area including by Committee Bay resources and DeBeers. The camp operator will be trained to operate and repair temporary camp buildings (tents), power, water supply, waste management and communications systems. Water lines used for water supply and grey water will be insulated to prevent freezing and back-up plans in place. The grey water sump will be monitored for capacity and expanded or a new one excavated if there is a problem.

Backup materials including water supply pump and camp generator will be on site. A minimum of 100 litres of acceptable drinking water should be stored at the site in case of a problem with the water supply. Emergency supply of materials can be provided by the expeditor and Tindi Aviation.

## ABANDONMENT AND RESTORATION

38. Provide a detailed description of progressive and final abandonment and restoration activities at the site.

At the end of the season, the camp site will be secured and all waste incinerated / removed. When the camp is dismantled at the end of exploration, all materials will be removed from site (for re-use or appropriate disposal) and disturbed areas (including grey water sump) covered and graded. See attached Abandonment Plan.

## BASELINE DATA

39. Has or will any baseline information be collected as part of this project? Provide bibliography.
- ☐ Physical Environment (Landscape and Terrain, Air, Water, etc.)
  - ☐ Biological Environment (Vegetation, Wildlife, Birds, Fish and Other Aquatic Organisms, etc.)
  - ☐ Socio-Economic Environment (Archaeology, Land and Resources Use, Demographics, Social and Culture Patterns, etc.)
  - ☐ Other:

No baseline data has been/will be collected.

## REGULATORY INFORMATION

40. Do you have a copy of:
- ☒ Article 13 - Nunavut Land Claims Agreement
  - ☒ NWB - Water Licensing in Nunavut - Interim Procedures and Information Guide for Applicants
  - ☐ NWB - Interim Rules of Practice and Procedure for Public Hearings
  - ☐ NWTWB - Guidelines for the Discharge of Treated Municipal Wastewater in the NWT
  - ☒ NWTWB - Guidelines for Contingency Planning
  - ☒ DFO - Freshwater Intake End of Pipe Fish Screen Guideline
  - ☒ Fisheries Act - s.35
  - ☒ RWED - Environment Protection- Spill Contingency Regulations
  - ☒ Canadian Drinking Water Quality Guidelines
  - ☒ Public Health Act Camp Sanitation Regulations
  - ☒ Public Health Act Water Supply Regulations
  - ☒ Territorial Land Use Act and Regulations

You should consult the above document, guidelines, and legislation for compliance with existing regulatory requirements.

## **Environmental Impact Assessment**

### **Existing Environmental Conditions**

**Biophysical** – Both the Contwoyto Lake area and the High Lake Greenstone Belt lie within the zone of permanent permafrost. The mean annual temperature of -20°C reflects its Arctic location. The climate is typical of the western Arctic with average temperatures in the winter months of -30°C to -35°C, and +15°C to +25°C in the summer. The ground remains snow covered for more than 200 days a year (generally September to June). Rivers break up in June and lakes are ice bound until early July.

The project area is on the Slave geological province, a shield area that has been significantly modified by glacial processes. Expansive till plains with eskers, kames, and moraines are the predominant geomorphologic features though glacially sculpted bedrock (including roches moutonnées), felsenmeer, and glacial boulder fields are also present. Bedrock is estimated at 50% of the total surface area, though locally it can be much higher.

The regional area is used by wolves, caribou and musk oxen and may be used by grizzly bears. (COSEWIC listed as special concern). Caribou (barren-ground) may migrate through or close to the planned exploration area between late February and early May and again from late July to early December. Musk oxen are present in the area in low density. The Contwoyto Lake and Hood River area is a raptors' nesting/denning area. Species include Peregrine falcon, Gyrfalcon and Rough-legged hawk, grizzly bear, arctic fox, wolf.

**Socio-economic** – No park or settlements exist within the area of proposed exploration. There is no known existing man-made infrastructure (roads, power-lines, buildings, campsites) at the proposed sites. The Yellowknife – Lupin – Jericho – Ulu winter road is established during the winter months to bring in supplies. The Penthouse/Esker Lake campsite is located beside a source of water and near known landing sites suitable for tundra tire equipped aircraft or float equipped aircraft. The Lupin, Jericho and Ulu airstrips are readily accessible. The Penthouse (Hood River) area is adjacent to the Zinifex (Wolfdene) Ulu Project. The Contwoyto Project is close to but on the east side of Contwoyto Lake from the Lupin (Zinifex) and Jericho (Tahera) Mine.

## Potential Impacts and Mitigation

The attached NIRB potential project / environment interactions matrix (Table 1) outlines activities associated with the project and where they may interact with existing biophysical and social conditions. The project / environmental interactions matrix outlines works related to the camp, exploratory drilling and prospecting and general environmental, social, economic and health components. It is noted where the potential for interaction exists, which can be used to determine potential impacts.

**Biophysical** - Impacts on **air quality** can result from discharge of exhaust from airplanes, helicopters, drilling operations and diesel generator power supply at camp as well as emissions from incineration. Given the remote location and lack of air quality issues in the project location, these short duration and small scope activities are not expected to result in measurable air quality impacts at the local or regional scale. An Environment Canada approved incinerator will be selected. **Noise** can result from the use of planes, helicopters and drills and to a lesser degree from activities within the camp and at the airstrip that can disturb wildlife. Mitigation is noted in the wildlife section, below.

**Soil and permafrost quality** can be impacted from spills of fuel and other materials, waste discharge and drilling. Preventative measures including storage in appropriate containers in areas where spill clean-up is easy (ie on flat areas at runway and in camp, at least 30m away from watercourses) and fueling in these areas with diligence will be taken. Drip pans, or other such preventative measures, will be used when refuelling equipment on site.

Materials storage will meet the requirements of the federal *Environmental Protection Act*. Environment Canada recommends secondary containment, such as self-supporting insta-berms, also be used when storing barrels of fuel on location. A spill response plan (including preparation, clean-up, removal and reporting) is attached. The discharge of grey water to a sump meets acceptable standards and would be covered with 40 cm of native material following abandonment.

The following additional mitigation should be followed during drilling:

- Drilling will occur at a minimum of 30 m from any water body.
- Absorbent pads will be placed under areas where fuel, lubricants and other toxic materials may leak from to assist in clean up following drill operations.
- Drill cuttings will be pumped to a sump (natural depression or temporary dyke) a minimum of 30 m from any surface water body where water will infiltrate to ground, direct flow into a water body is not possible and no additional impacts are created.
- Any fuel or hazardous material will be located ) a minimum of 30 m from any surface water body.
- All sumps shall be backfilled with native surficial material upon completion of drilling and contoured to match the existing landscape.
- If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.

**Surface water hydrology** can be disrupted from removal of water for camp use and drilling while surface water quality may be effected by fuel and toxic material spills (including drill slurry) and grey water disposal. Physical fish habitat (stream bed) could be impacted from nearby drill activity or access (crossings). Water extraction at the camp and drill site, water quality impacts from fuel or other toxic materials such as drill slurry can ultimately negatively affect fish.

The measures noted under the soil and permafrost discussion will mitigate for surface water quality impacts from spills. Sediment and drill fluids are also issues for surface water. Activities that may result in sedimentation should be avoided or sediment control measures put in place to mitigate downstream impacts. Any grey water discharge will be a minimum of 30 m from any body of water.

During the proposed programs, water use at the camp was/will be taken from the adjacent Penthouse / Esker or Contwoyto Lake. When the camp is in use, extraction volumes to sustain 15 to 25 people will be approximately 1.5 to 2.0 m<sup>3</sup> per day, which will not impact aquatic habitat in the large lake. Generally drilling would use up to 45.8 m<sup>3</sup> per day (estimated) and would be obtained from one of the lakes in the area. The intakes would be screened as per DFO requirements to prevent fish kills from pumps. Disturbance to lake (or any stream) bed or banks will be minimized by placing temporary platforms for access and by excavating a sump quickly and cleanly, if required, for pump placement. These measures will ultimately mitigate for impacts on fish.

**Vegetation communities and wildlife habitat** can be disturbed by clearing/grading at the camp and drill sites. During drilling, any soil removed should be side-cast and the disturbed area recovered following drilling. Soil should also be stored and covered at the camp site for reclamation at abandonment.

Wildlife can be displaced through loss of habitat, disturbed by noise (helicopter, plane, generators, drilling) or human interaction. Habitat loss can result in displacement of animals. Disturbance can cause health problems (stress-induced) and mortality. Mitigation processes would include:

- avoiding disturbance of any raptor nests (particularly late May to mid-Aug when active) so that birds are not stressed to abandon the nest, bear dens and wolf dens;
- limiting helicopter overflights are to a minimum altitude of 300 metres whenever possible;
- avoiding helicopter flights over areas of known raptor nests during active reproductive periods, near waterfowl and shorebird staging areas during critical seasons and near large mammals;
- stopping drill activities and associated work if caribou cows appear nearby;
- recording wildlife sightings and passing this on the rest of the crews;
- Ensure proper storage of hazardous materials to avoid exposure to wildlife;
- All personnel be aware of and follow wildlife deterrence techniques (including proper storage and disposal of food) to reduce the possibility of attracting wildlife to the camp and drill areas;
- All personnel should have bear safety training and be aware of the penalties for shooting Polar bears, even in self defense.

**Socio-economics** – The use of local services for transportation and camp will provide economic benefits. Access to the site will be via Yellowknife. Notable risks to human health and safety exist

from accidents during helicopter travel, interactions with wildlife and working with power, machinery such as the drill rig and hazardous materials. The site safety program including emergency response will minimize accidents and injuries. Water supply will meet the requirements of the Public Health Act Water Supply Regulations.

With proper mitigation, the project should not affect land and water use, traditional use or cultural resources. All measures should be taken to avoid defense kills of bears. The camp location on an island will minimize human-wildlife interactions.

## **Spill Contingency Plan**

*A comprehensive Spill Contingency Document has been attached.*

### **Preventative Measures and Spill Preparation**

Preventative measures include:

- Materials storage will meet the requirements of the federal *Environmental Protection Act*. Environment Canada recommends secondary containment, such as self-supporting insta-berms, also be used when storing barreled fuel on location.
- Secure valves before and after fuel transfer and do not leave fuel transfer unattended.
- Drums and hoses will be inspected regularly for leaks and pans or absorbent pads placed below fuel transfer areas and stationary machinery.
- Toxic materials will be stored away from sensitive areas (30 m from any surface water body).

The following measures will allow for preparation in the event of a fuel or other toxic material spill:

- Material safety data sheets (MSDS) will be on site for all products.
- Spill kits will be located at camp (1), fuel storage area (1) and active drill site (1).
- This plan will be posted at camp, fuel storage area and drill site.
- All persons on site trained about MSDS sheets, use of spill kits and spill response and reporting.

Spill kits will contain:

- 20 lb ABC fire extinguisher
- polaski
- oil absorbent pads (package of polypropylene pads) that will also contain spills on water
- hydrocarbon-sorbent socks (polypropylene – one approximately 4' by 3" and one 10' by 3")
- 1 bag treated oil only cellulose particulate
- 1 roll poly plastic sheet 110'x 6'x 6 mil thickness
- 6 poly disposal bags and ties (45 gal drum size, 6 mil)
- shovel
- 2 pair nitrile gloves (large)
- utility knife
- labels / marker

Additional response equipment in the project area should include plastic pails, extra disposal bags and plastic sheets, absorbent pads and socks

### **Spill Response**

The steps to follow if you are first on the scene of a spill include:

1. Protect human health and safety. Assess any risk of fire or explosion, eliminate ignition sources and keep away if there is a risk.



2. Identify the product and potential dangers. Look at the MSDS sheet and wear appropriate safety gear.
3. Stop the flow from the source, if possible.
4. Contain the spill. Spill containment may be by materials in the spill kit (absorbent pads) and berming soil/snow or trenching with hand tools or available machinery.
5. Report to the head site geologist.
6. Clean up what is immediately possible using materials from the spill kit.

Clean-up of spilled fuels and other toxic materials on land (including snow) will involve:

- Absorbing liquids with absorbent pads or cellulose particulate.
- Shoveling contaminated soil/permafrost for disposal or remediation.
- Storage of materials should be in drums or impermeable containers and labeled.
- Fuel or oil contaminated soil can be incinerated at the camp or aerated on tarps for natural remediation. Some materials must be shipped off-site to an appropriate disposal site.
- Where a large area of soil/permafrost is contaminated, further remediation methods will need to be considered.

Spills onto ice will involve berming with snow, absorbing spilled material and clean up with shovels. Spills of fuel into surface water should be dealt with by redirection away from the water, where possible, containment with absorbent socks and clean up with hydrophobic absorbent pads.

### **Spill Reporting**

Upon observing or receiving a report of a spill on Golden Bull Resources' properties or campsite, Bruce Goad, P. Geo (the company's onsite geological consultant), will:

- Report major spills immediately to the 24-Hour Spill Line at (867) 920-8130 and to the DIAND Water Resources Inspector at (867) 975-4298. Major spills are those that would cause harmful effects to air, land, water, fish, wildlife or human health. A fuel spill greater than 200 L is considered major.
- Fill out a spill report form for submission to the DIAND Water Resources Inspector no later than 30 days following any spill.

### **Abandonment and Remediation Plan**

*A comprehensive Abandonment and Remediation Document has been attached.*

**Respectfully submitted on behalf of Golden Bull Resources Corporation**  
(a 100% owned subsidiary of Golden River Resources Corporation)

**By:**

**Bruce Goad, P. Geo.,  
Inukshuk Exploration Inc.**

**E-mail: inukshuk@uniserve.com**